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The *FEMP MONTHLY UPDATE* is prepared expressly for the Department of Energy's Office of Federal Energy Management Programs (FEMP). The purpose of the *UPDATE* is to provide FEMP management staff with timely information on topics relevant to the program. This includes the status of pending Federal and state legislation and summaries of public and private sector energy-related activities. The *FEMP MONTHLY UPDATE* is prepared for FEMP by Energetics, Incorporated, (202) 479-2748.

DOE BULLETIN BOARD

Short Term Energy Outlook, Energy Information Administration (EIA), December 2003

The November average motor gasoline prices (regular unleaded gasoline) fell to \$1.51 per gallon. Across the country, prices have been declining following the late summer price surge, but are anticipated to level off this winter due to a tight inventory situation. Heating household costs are dependent on the weather, but in relation to last winter are currently forecasted to increase 6 percent for heating oil and 2 percent for electric heat, whereas heating oil will decrease 4 percent and propane will stay the same.

Natural gas prices are expected to decline 2.3 percent in 2003, yet demand will create an increase of one percent in 2004. If normal weather prevails, spot prices above \$5 million Btu are expected. Storage levels are above average and potentially can keep prices in check.

Renewable energy generation sources, especially wind, are expected to continue growing in 2004. Electricity remains constant. Nuclear generation, hydroelectric generation, and coal consumption for electricity are expected in increase slightly in 2004.

WHAT'S NEW ON THE FEMP WEB SITE

The websites of the six EERE regional offices have been redesigned for consistency with the new EERE print standards in mind. View the new look at www.eere.energy.gov/rso.html. Information on the print standards for FEMP, including templates and logos, is available from www.fempqp.doe.gov.

NOTABLE QUOTES

Statement on EIA Analysis of Gasoline Prices

"EIA's report concludes that the gasoline price increases experienced in the nation last summer were due largely to long-term supply tightness and high levels of demand, not opportunistic activity by sellers...President Bush has, from the beginning of his Administration, focused on improving America's long-term energy security

CONGRESSIONAL ACTIVITIES

CONGRESSIONAL SCHEDULE

Congress has adjourned for the year and is expected to return to Washington by Tuesday, January 20; this is also the day the President is scheduled to deliver his State of the Union Address.

STATUS OF PENDING APPROPRIATION BILLS OF INTEREST TO FEMP

Continuing Resolution The Conference Report for H.J. Res. 82 – Consolidated Appropriations bill was approved by the House and Senate on December 8. The \$820 omnibus bill serves as a continuing resolution vehicle to keep operational through January 31, 2004, programs in 15 Federal agencies. The bill rolls into one bill, seven of the 13 annual appropriations bills that are now pending final Congressional action. Five of the seven bills include funding for construction and renovation of Federal facilities:

- ➤ H.R. 2673/S. 1427 FY 2004 Appropriations for Agriculture, Rural Development, Food and Drug Administration, and Related Agencies
- ➤ H.R. 2799/S. 1585 FY 2004 Appropriations for Commerce, Justice, State, and the Judiciary
- ➤ H.R. 2660/S. 1356 FY 2004 Appropriations for Labor, Housing and Urban Development, and Education
- ➤ H.R. 2989/S. 1599 FY 2004 Appropriations for Transportation, Treasury, and Independent Agencies
- ➤ H.R. 2861/S. 1584 FY 2004 Appropriations for Veterans' Affairs, Housing and Urban Development, and Independent Agencies

Refer to <u>Appendix A</u>, Status of FY 2004 Appropriations Bills

Refer to the FY 2004 Appropriations Summary Chart at

<u>www.eere.energy.gov/femp/resources/initiatives.</u> <u>html</u>. The chart is updated on a weekly basis

NOTABLE QUOTES (continued)

and reducing our dependence on foreign source of energy. The President has called for the development of a hydrogen-based economy, which would transform our transportation system from one dependent on gasoline to one based on clean, abundant Hydrogen. – Secretary of Energy Spencer Abraham

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while Congress is in session and working on FY 2004 appropriations.

STATUS OF PENDING AUTHORIZATION BILLS OF INTEREST TO FEMP

H.R. 6 (Conference Report 108-375) – Energy Policy Act of 2003 The Senate tried, but failed to approve the conference report in December before adjourning for the year. Shy only a few votes, Conference Committee Chair Pete Domenici (R/NM) hopes to bring up the vote early next year. However, some observers

speculate that Congress will not be able to resolve contentious issues and achieve the necessary votes in the Senate until March or later. Congress will be out of session most of January and includes holiday recesses in February. Congressional staff reportedly are working on crafting language to attach to other legislation in order to encourage dissenting Senators to vote for the conference report in its present form. Any changes to the conference report language would automatically return the bill to the conference committee for another vote, thus further delaying passage of a bill. The House approved the conference report on November 18. The bill includes 16 separate titles:

- 1. Title I Energy Efficiency (Subtitle A Federal Programs provide new guidance and program enhancement provisions; refer to the FEMP Legislative Database at www.eere.energy.gov/femp/resources/initiatives.html
- 2. Title II Renewables
- 3. Title III Oil and Gas
- 4. Title IV Coal
- 5. Title V Indian Energy
- 6. Title VI Nuclear Matters
- 7. Title VII Vehicles and Fuels (includes alternative fuels and vehicles)
- 8. Title VIII Hydrogen
- 9. Title IX Research and Development (includes energy efficiency and renewable energy programs)
- 10. Title X Department of Energy Management
- 11. Title XI Personnel
- 12. Title XII Electricity (includes utility restructuring provisions)
- 13. Title XIII Tax (includes tax incentives for energy efficiency and renewable energy technologies)
- 14. Title IV Miscellaneous
- 15. Title V Ethanol (as a renewable fuel)
- 16. Title XVI Studies

Refer to www.eere.energy.gov/femp/resources/initiatives.html - Legislative Databases for more information on pending energy-related legislation.

NEW LEGISLATIVE INITIATIVES OF INTEREST TO FEMP

➤ See <u>Appendix B</u> – New Legislation of Interest to FEMP

HEARINGS OF INTEREST OF FEMP

No hearings of interest to FEMP.

FEDERAL AGENCY ACTIVITIES

DEPARTMENT OF ENERGY (DOE)

On December 4, 5 and 7, three public consultations sponsored by a U.S. – Canadian Power System Outage Task Force sought comments on the August 14 electricity blackout report released in **November.** The forums, held in Cleveland, New York City, and Toronto respectively, also provided an opportunity for the public to suggest ways for preventing future blackouts. The blackout report revealed that FirstEnergy and the Midwest reliability coordinator violated voluntary rules meant to ensure stable electric service. At the Cleveland forum, the Ohio Consumers Counsel (OCC) stated that FirstEnergy Corp. should be held accountable for its role in the August blackout. Jeffrey Small of the OCC told Federal investigators that, "The OCC is deeply concerned about the human hardship and financial costs" caused by the blackout and suggested that a Federal investigation assess FirstEnergy's transmission system, including the company's tree-trimming maintenance and computer control systems. The blackout, which spread throughout the Midwest, northeast and southern Canada, resulted in \$6 billion in economic losses. Several Ohio congresspersons including Democratic representatives Dennis Kucinich, Stephanie Tubbs Jones, Marcy Kaptur and Sherrod Brown, and Republican Steve LaTourette have requested another forum in Cleveland since the public consultation was sparsely attended. Attendees at the public consultation in New York City heard from William Museler of the New York Independent System Operator (NYISO), New York and New Jersey state officials, and reliability coordinators for regional power grids. Mr. Museler said that before the task force releases recommendations and a final report in early 2004, it should closely look at the implications of FirstEnergy's failure to take quick preventive action in Ohio and notify neighboring utilities of the pending problem. He also stated that, "...If the rules had been followed and the companies involved had supported and insisted on compliance with the rules, the blackouts would have either been avoided entirely, or certainly been much less severe." An investigation of the August 14 power failure conducted by the NYISO resulted in the following recommendations:

- NERC reliability standards must be made mandatory, not voluntary.
- Strengthen the transmission grid in New York and surrounding areas by providing incentives to expand transmission capabilities.
- Communications among the ISOs, RTOs and control areas need to be significantly improved.
- Participation in an ISO, RTO or tight power pool for reliability purposes should be made mandatory.

A representative speaking on behalf of New Jersey Governor James McGreevey (D) criticized the stalled energy bill and asked that Congress consider passing a separate electricity bill to impose mandatory reliability standards. Utility representatives at the Ontario forum made similar recommendations to those voiced in Cleveland and New York City. Public testimony at all three forums endorsed Federal reliability standards and improvement of a remote sensing network to monitor power flows and increase communication among transmission operators. (Source: *Online Exclusive*, December 5, 2003; *Cleveland Plain Dealer*, December 5 & 6, 2003)

The U.S. Department of Energy has pledged to invest \$61 million to make energy efficiency improvements in industrial facilities. Private industrial partners will allocate over \$54 million in cost-share funding to support a total of 32 projects. Some of the projects will involve collaborative research, development and demonstration of new, energy efficient technologies while other projects will focus on identifying opportunities to increase energy efficiency and productivity in plants using current technologies and practices. DOE Secretary Spencer Abraham said, "These technologies will improve

productivity, save energy and reduce environmental impacts in many energy-intensive industries in the nation today...The Department of Energy is working closely with industry to help improve energy efficiency leading to America's energy independence." (Source: DOE Press Release, November 5, 2003)

National Laboratory Activities

Lawrence Berkeley National Laboratory (LBNL)

LBNL has launched an initiative to bring Tribal utilities, public power agencies, and municipal utilities together to determine how to best procure and generate renewable energy. The Public Renewables Partnership (PRP) will assist members in evaluating renewable energy resource opportunities and provide strategic and resource planning and market analysis. Program goals will be met by leveraging national and regional funding sources to conduct research, purchase renewable energy technologies and products in the aggregate, and maximize administrative effectiveness in developing energy outreach tools. Organizations supporting and managing the program include the Center for Resource Solutions, Western Area Power Administration, American Public Power Association, U.S. DOE Wind Powering America Program, and U.S. DOE GeoPowering the West Program. For more information on the program, contact Bill Golove at 510-486-5229.

The High-Performance Commercial Buildings Systems (HPCBS) research program, funded by the California Energy Commission and administered by LBNL, seeks to improve lighting efficiency through control systems that optimize the use of natural lighting. According to Francis Rubinstein of LBNL's Environmental Energy Technologies Division, "Previous research here taught us that lighting controls can reduce lighting energy consumption in a variety of ways." The IBECS program developed by LBNL and Vistron is an integrated equipment communications network used to manage interior lighting. IBECS researchers applied the IBECS system to photosensors to integrate electric light and daylight; occupancy sensors; and motorized shades and windows that darken and lighten with the application of an electric current. The goal of the program is to achieve, by 2015, reduced lighting energy consumption by 59 percent in new construction and 43 percent in major retrofits. IBECS technology is comprised of an embedded microchip in an electronic device that allows it to communicate digitally with a control point. An IBECS network was installed in a building on the LBNL campus. Ms. Rubinstein stated that the IBECS system will be useful in power emergencies or during high power prices: "Building operators, among others, will be able to use this technology to reduce their power consumption when the real-time price of electricity starts to rise...They can also respond quickly to shut down energyconsuming equipment when the electricity grid is threatened by outages or other reliability problems." Program managers estimate that if the IBECS technology saved 40 percent of total energy savings in a building, and was installed in 20 percent of California's buildings, consumers could save \$250 million in reduced energy costs. (Source: Science Beat, www.lbl.gov)

National Renewable Energy Laboratory (NREL)

HelioVolt Corporation and NREL are teaming up to promote the commercial production of advanced solar cells. NREL has provided their facilities to HelioVolt researchers to develop thin-film Copper Indium Gallium Diselenide (CIGS) solar cells. John Benner of NREL's National Center for Photovoltaics said, "This is an excellent example of beneficial collaboration between a private company and a national laboratory...By removing the obstacles to mass production of thin film cells, we can fast-forward to the day when solar is cost-competitive with conventional energy sources in a wider range of applications." The project is funded through a \$100,000 Cooperative Research and Development Agreement. HelioVolt presented research findings on the solar cell project at the 16th NREL Industry Growth Forum on November 17-19, 2003. More information on the forum can be found at www.incubator.com/nrel. (Source: www.nrel.gov, November 12, 2003)

The Federal Laboratory Consortium for Technology Transfer (FLC) recently honored NREL with an Outstanding Technology Development award for raising awareness about the role that renewable energy can play in energy security. Specifically, the award recognized NREL's participation on a DOE task force that was organized after September 11, 2001, to identify emerging

technologies for strengthening the domestic energy infrastructure and decrease response time in deployment of resources during disasters. (Source: NREL Press Release, www.nrel.gov)

ENVIRONMENTAL PROTECTION AGENCY (EPA)

ENERGY STAR®

On October 9, the Environmental Protection Agency met with water utilities, plumbing manufacturers, retailers, among others to discuss the idea of establishing a new water efficient product labeling program. Over 100 stakeholders agreed that plans for development of a program similar to the ENERGY STAR® program should move forward. Kathleen Hogan, EPA's Director of the Climate Protection Partnership Division expressed hesitation to support the program because she said that there might not be enough water savings measures available to warrant the expensive labeling endeavor. She said, "Consumers aren't ready to sacrifice performance. You can sell green on top of other features, but the products must deliver on savings claims." Richard Dale of Home Depot supported the program in areas "where it makes sense." He also suggested that EPA establish an innovation award for the water efficiency industry. Over the next several months, additional meetings will be held seeking input from others on the proposed program. For information on the dates and locations of these meetings, visit the Waterwiser website at www.waterwiser.org.

DEPARTMENT OF THE INTERIOR (DOI)

Bureau of Land Management (BLM)

BLM has created a new website with information to encourage public participation in the Wind Energy Programmatic Environmental Impact Statement (EIS) process. The website contains information on how to evaluate issues associated with wind energy development on Western public lands (excluding Alaska) administered by the BLM. The website includes information on the purpose, scope, and schedule of the planned EIS; information on how to participate in the EIS process, including a public meeting schedule; basics of wind energy, including environmental issues, maps, photos, and web links to wind energy resources; and other EIS documents available for downloading. The site also provides news updates, a list of frequently asked questions, and provides a forum for submitting comments and questions about the EIS process. The website can be accessed at windeis.anl.gov.

FEDERAL ENERGY REGULATORY COMMISSION (FERC)

On November 25, FERC adopted a final rule establishing standards of conduct for transmitting public utilities and natural gas pipelines. The new rule revise current gas and electric standards by expanding the definition of an energy affiliate covered by the standards, ensuring that transmission providers do not extend market power beyond their jurisdiction, and ensuring that transmission providers provide service in a non-discriminatory basis. The main goal of the final rule for standards of conduct is to ensure that transmission providers function independently of their energy affiliates so that information access does not unfairly benefit their own or their affiliates' sales. In order to comply with the new rule, each transmission provider must provide to FERC a document listing measures the company will take by June 1, 2004. (Source: www.ferc.gov)

On December 11, FERC held a hearing with electric industry officials to discuss the need for stronger reliability rules. Industry participants admitted that a standardized transmission operation is lacking; the lack of such a system caused the massive power outage this past August in the Midwest, the Northeast and Canada. Alison Silverstein of FERC said, "We need to develop a clear understanding of what effective compliance [with transmission rules] means." One solution presented at the hearing would be to establish an organization similar to the Western Electricity Coordination Council (WECC) – an organization that manages, under a standard set of reliability standards, voluntary contracts between utility transmission owners and operators west of the Rocky Mountains. The program manages 23 of the 33 control area operators in the region, and only 19 contract violations occurred in the WECC territory from August 2002 to August 2003. FERC Chairman Pat Wood announced that "it might be time for us to

rethink" provisions governing electric reliability standards in the *Federal Power Act* since comprehensive energy legislation has stalled in Congress. Mr. Wood urged establishment of FERC's proposed reliability standards by summer of 2004, regardless of whether a comprehensive energy bill has passed. "The bottom line is we need to have some standards in place, hopefully by this summer." Although FERC has yet to establish a plan for implementing the proposed standards, the commission could require utilities to implement a policy when they seek changes to market-based rates – a carrot and stick approach to assist FERC achieve the agency's policy objectives. Hans Konow of the Canadian Electricity Association (CEA) called for the drafting of new reliability standards within the context of international market participants. He said, "CEA agrees the present system of voluntary reliability standards must change, particularly as electricity markets continue to evolve. However, because the transmission grid is international in scope, the focus must be on solutions that are international as well." (Source: *Greenwire*, December 12, 2003, *CNW Telbec*, December 1, 2003, and *Reuters*, December 1, 2003)

FERC has exercised existing statutory authority to address violations of electric system reliability by writing a pending order requiring electric transmission system operators to report violations. FERC Chairman Pat Wood called the order "a modest but appropriate step forward." Congress has provided FERC with an additional \$5 million in funding to support power grid reliability in FY 2004. Mr. Wood said that the funding could pay for audits to assess transmission system operator compliance with NERC standards. Commissioner Nora Mead Brownell expressed support for the order, but said, "We need to go further." She advocated the creation of a set of benchmarks to evaluate each transmission system's investment in grid reliability. FERC is now accepting public statements on the degree to which the commission can address grid reliability under current law. For more information, visit www.ferc.gov.

GENERAL ACCOUNTING OFFICE (GAO)

In a December 8 letter to Representatives Dave Camp (R/MI) and Mac Thornberry (R/TX) of the Select Committee on Homeland Security, the General Accounting Office (GAO) responded in writing to questions posed at a September 17 hearing entitled, "Implications of Power Blackouts for the Nation's Cybersecurity and Critical Infrastructure Protection: The Electric Grid, Critical Interdependencies, Vulnerabilities, and Readiness." The GAO response provided recommendations for overcoming challenges faced by the Department of Homeland Security in integrating its information gathering and sharing with regard to critical infrastructure protection (CIP). A survey of state, municipal, and Federal Government employees revealed that all tiers of government perceive the current information-sharing process among the tiers to be ineffective.

GAO notes that while improvements in the information sharing process among the Federal, state, and local governmental levels have been made, the following efforts are needed to improve CIP:

- Develop a comprehensive and coordinated national plan to facilitate CIP information sharing that clearly delineates the roles and responsibilities of Federal and non-Federal CIP entities, define interim objectives and milestones, set timeframes for achieving objectives, and establish performance measures;
- Develop fully productive information sharing relationships within the Federal Government and between the Federal sector and state and local governments and private sector;
- Improve the Federal Government's capabilities to analyze incident, threat, and vulnerability information obtained from numerous sources and share appropriate, timely, useful warnings and other information concerning both cyber and physical threats to Federal entities, state and local governments, and the private sector; and
- Provide appropriate incentives for non-Federal entities to increase information sharing with the Federal Government and enhance other CIP efforts.

GENERAL SERVICES ADMINISTRATION (GSA)

In response to a recent unsolicited proposal to apply for conservation, rebates, and financial incentives for the Federal Government, the General Services Administration is seeking to identify other companies interested in providing a similar service for the Greater Southwest Region. Specifically, GSA is interested in identifying companies that maintain databases with information on financial incentives offered by state and local governments, utilities, and other others, including their level of interest (at no cost to the Federal Government) to apply for such incentives. For further information on this inquiry (this is not a solicitation), contact Kevin Myles at 817-978-9942.

DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS)

The Health Resources and Services Administration of HHS is seeking technical expertise to develop architectural guides for the replacement critical access hospital replacement facilities. For more information on Solicitation Number 121-04-1001, contact Demetra Lynarkakis at 212-264-4031.

WHITE HOUSE

On December 17, President Bush signed two directives that will help protect the nation's infrastructure from terrorist attacks. One directive requires that Federal agencies establish an inventory of key infrastructure, including the telecommunications, chemical, transportation, and information technology sectors. Federal agencies must also coordinate with state and local governments and private sector groups to assess infrastructure vulnerability within these sectors and identify ways to protect them. All agencies must present their reports to the Department of Homeland Security (DHS) within the next year and each successive year thereafter. The second directive requires that DHS establish a national preparedness goal that includes spending parameters for the purchase of infrastructure security equipment. Calling the directives the "foundational documents for our homeland security strategy", a senior administration official said that funding for the new policy will be included in the Administration's FY 2005 budget proposal to be released in February. (Source: *National Journal's Technology Daily*, December 17, 2003)

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STATE AND LOCAL GOVERNMENT ACTIVITIES

ATLANTA REGION

No news of interest to report.

BOSTON REGION

On June 17, 2003, the Vermont legislature passed *S. 57*, which establishes a renewables rebate program. Effective October 24, 2003, the program authorizes the use of a portion of Vermont's petroleum escrow fund to provide \$522,900 to support the installation of 120 to 150 new qualifying solar electric, solar hot water, and small wind applications. The Renewable Energy Resource Center will offer incentives to residents, businesses, and municipalities to take advantage of the program. and a consumer education program will be administered by the Vermont Energy Investment Corporation. The program serves two groups of grant recipients:

- 1) Vermont Solar and Wind Partners who have agreed to comply with installation and equipment standards and are eligible to receive a rebate of \$2.50 per watt of installed cost, not to exceed \$12,500.
- 2) Other parties who are eligible to receive \$1.50 per watt, not to exceed \$7,500.

The program specifies no minimum or maximum sizes for eligibility, but incentives will only support the first 5 kW of installed capacity for a solar electric or wind system and the first 500,000 Btu per day rating for solar thermal applications. For more information, visit www.rerc-vt.org/incentives.

CHICAGO REGION

General State Activities

Through the Rebuild Iowa program, initiated in February 2003, Polk County, Iowa, has saved more than \$45,000 in energy management costs. The program, which focused on efficiency measures in the county's administration building, courthouse, jail, maintenance facility, and public works facility, entailed rate changes, rebates for new equipment, and the installation of energy efficiency measures. The program also included implementation of an Energy Management Improvement plan that involving the upgrade of light fixtures, occupancy sensors, energy-efficient furnaces and water heaters, vending machine control devices, and changes in lighting schedules. Chris Frantsvog, Polk County Energy Coordinator said, "The core of what Polk County hopes to do is operate our facilities more efficiently and avoid the unnecessary cost of inefficient equipment." For more information, call Lori L. McDaniel at (515) 281-8094.

Status of Utility-Related Activities

Since legislation was passed in 1994, requiring that Xcel Energy add wind to the company's energy mix by 2003, the installation of over 500 large and 130 small wind towers around the State of Minnesota makes it the third largest wind producing state. Lincoln County Commissioner Jim Nichols said, "Minnesota is neck and neck with Iowa as the third-largest wind-producing state behind California and Texas...We came from nowhere 10 years ago to be the third largest...It's a quantum leap, considering we didn't have anything." Project developers estimate that a 100 MW wind farm generates \$370,000 in tax revenue over its lifetime. Minnesota procures 1.5 percent of the state's electrical energy from wind and purchases the power inexpensively for 2.5 to 3.5 cents per kWh, while coal is purchased at a higher price of 3.5 to 5 cents per kWh. By 2010, Excel will expand the company's wind power contracts from 302 MW to 1,125 MW. Otter Tail Power will install 21 MW of wind capacity by the end of 2003, and Great River Energy expects to have 100 MW online by 2005. Further information on Minnesota's green power program can be found at www.dnr.state.mn.us/volunteer/novdec03/wind.html.

DENVER REGION

No news of interest to report.

PHILADELPHIA REGION

General State Activities

Burlington County, Pennsylvania, is exploring the level of interest of 40 towns, schools, and fire districts to purchase electric power through a cooperative agreement. The Burlington County Freeholder Board is promoting the effort to buy electricity in bulk. Board Director William Haines, Jr. said, "We know the price of energy is going to increase, and we want to provide leadership so we can all reduce our costs...Our chances for saving are increased by the number of participants we can convince to join in." The cooperative purchase may reduce electric costs to the County by \$100,000 annually. The county also plans to generate electricity through the conversion of methane gas from a landfill that will be built and operational by 2006; the excess electricity generated will be sold to utility companies. Over \$3.9 million in state grant funding was secured to cover the cost of the plant for the first five years. The U.S. Environmental Protection Agency estimates that about 350 of the 6,000 total landfills in the U.S. convert gas to energy. (Source: *The Philadelphia Inquirer*, November 28, 2003)

The State of Pennsylvania is considering new legislation to encourage the development of renewable energy by creating grants and tax incentives. Legislation proposed in the State Senate would establish

an alternative fuels incentives fund, using money taken from the utility company gross receipts tax, which would in turn be used to pay half of the cost of installing a fuel cell. Legislation proposed in the State House provides tax credits to businesses generating power from renewable sources. Utilities and consumer environmental groups reportedly do not believe that the state is doing enough, relative to other states, to support of renewable energy development. State officials argue that Pennsylvania lags behind other states in providing grants for renewable energy. Citing New Jersey's \$156 million for the state's Clean Energy Program and California's \$500 million for renewable energy programs, John Hangar of Citizens for Pennsylvania's Future said, "It's absolutely the case that other states have made available more money for fuel cells and other forms of renewable energy." He also said, "It's going to be very hard for Pennsylvania to be part of the clean energy technology revolution unless we make available additional funds." Paul Champagne of PPL Energy praised a \$5 million state-funded fuel cell grant program initiated in 2002. "The grants have been kind of a catalyst for anyone looking to install fuel cells." PPL has installed several lower-cost renewable power projects in the state, including a compact, low-emissions microturbine power generator at Allentown's city wastewater treatment plant. Despite the low \$5 million in funding offered by the state, the Department of Environmental Protection received 138 applications, requesting \$46 million in grants and offering \$95 million in matching funds, Grant recipients will be named in January. (Source: Knight Ridder, November 30, 2003)

SEATTLE REGION

General State Activities

The City of Fresno, California, will provide \$4.125 million to install a 665 kW photovoltaic system and \$600,000 for energy efficient lighting, heating, and air conditioning at several city facilities. The city will receive a \$2.062 rebate after PowerLight Corporation completes the installation of equipment. The system is expected to save \$4.6 million over 25 years. City Council Member Henry Perea said, "I think these are the types of steps a progressive city takes... This is one of the rare occasions where you can save taxpayers' money in the long run and be pro-environment." (Source: *The Fresno Bee*, December 9, 2003)

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UTILITIES AND SUPPLIER ACTIVITIES

GENERAL ANNOUNCEMENTS

Restructuring Activities

On December 1, several southeastern utilities postponed efforts to create the SeTrans regional power grid. The project, which would have linked eight states in a transmission network, was put on hold because of a disagreement between the Federal Energy Regulatory Commission (FERC) and utilities over FERC's plan to create regional transmission operators. FERC's plan would combine the electric utilities' transmission grids into pooled networks to reduce bottlenecks, lower consumer costs, and boost electric supply. Southeastern utilities protested that other regions would benefit from the plan because southeastern states would be required to build new transmission grids that would result in higher prices for their customers and lower the cost of power in other regions. (Source: *Reuters*, December 2, 2003)

ATLANTA REGION

Restructuring Activities

The Florida Public Service Commission will vote on the approval of a program by Florida Power & Light (FPL) to provide their 3.6 million customers with electricity derived from renewable energy. FPL's green pricing program, which would begin during the first quarter of 2004, has established a goal

of signing on one percent of its customers within the first year. Pat Davis of FPL said, "It may not be the perfect answer to solving all of the renewable issues, but it's a step forward." FPL, one of 300 utilities in 32 states offering renewable programs, would provide tradable credits for the purchase of renewable energy. The utility will attempt to use renewable energy derived from sources within the state, but expects the demand to be so great that the utility will procure renewables from other states. For every 10,000 people who sign up for the green pricing program, FPL will construct 150 MW of solar operations in the state. (Source: *The Palm Beach Post*, December 2, 2003)

BOSTON REGION

Restructuring Activities

Renewable Energy Vermont and the North American Board of Certified Energy Practitioners will develop a Small Wind Task Analysis for those who install and maintain 100 kW or less wind power generation systems and equipment. Criteria will include safety, quality, and consumer acceptance, and establish requirements for accrediting training and educational programs. Other programs already in operation include task analyses for photovoltaic and solar thermal installations and a voluntary certification program for photovoltaic system installers. For more information, visit www.revermont.org.

CHICAGO REGION

Restructuring Activities

Wisconsin Governor Jim Doyle (D) signed legislation to shorten the regulatory approval process for new electrical transmission lines. According to Mr. Doyle, the bill will "deliver the electricity our state needs to promote growth and create high-skill, high-wage jobs." The legislation will apply to new projects and will allow projects to be reviewed within one year rather than two years. Specifically, the legislation will create a joint unit of the Public Service Commission and Department of Natural Resources to work exclusively on applications to build transmission lines or energy pipelines. The legislation will also target existing public rights of way for new transmission lines so that unspoiled areas would not be threatened with environmental damage. (Source: *Journal Sentinel* (Madison, Wisconsin), December 4, 2003)

FirstEnergy, the utility held responsible for the August 14 blackout that resulted in power outages throughout the Midwest, Northeast, and Canada, has released a plan to improve tree trimming, transmission operator training, and computer systems that monitor transmission lines. Charles Jones of FirstEnergy said that the company is instituting a new "zero tolerance" program for tree-related outages that offers employee incentives for improved tree maintenance. Last week, the Ohio Public Utilities Commission ordered FirstEnergy to submit a plan by March 1, 2004, describing how the utility will upgrade systems and training. (Source: *Dow Jones Business News*, December 3, 2003)

Information and materials on photovoltaics (PV) for Illinois, Indiana, Iowa, Minnesota, Missouri, Nebraska, and Wisconsin, are included on a new website funded by the U.S. Department of Energy. The website, "Solar Power in the Midwest," provides case studies, links to state and national PV websites, educational materials, and a "yellow pages" of other resources for consumers and professionals looking to incorporate PV into buildings. For more information, visit www.solarmidwest.org.

Public Benefits

Focus on Energy, a public-private partnership that delivers energy efficiency and renewable energy information, solutions, and services to Wisconsin residents and businesses has established the Wisconsin Wind Site Assessment Program. The program provides low cost wind system consulting and site assessments to small businesses and homeowners who purchase electricity from utilities participating in the program. Funded by a public benefits charge, the program operates in 31 utility service territories which serve 85 percent of Wisconsin's electricity customers. Site assessments provide information to customers on wind system siting requirements, principles of how wind systems work, and

their cost. The assessors are certified by the Midwest Renewable Energy Association. As part of its "Change a Light, Change Wisconsin" campaign, Focus on Energy organized the sale of 5,500 ENERGY STAR® qualified compact fluorescent light bulbs (CFLs) at the Milwaukee County Courthouse on November 5. The 5,500 CFLs sold will reduce Milwaukee county's annual energy consumption by 363,000 kWh and save consumers \$27,000. Focus on Energy is offering, until December 31, 2003, an instant cashback rebate of up to \$2 per bulb to assist consumers in switching to CFLs. The ceremony was attended by representatives of the U.S. Environmental Protection Agency, Wisconsin Department of Administration's Division of Energy, and Milwaukee County Public Works. For more information on the Wisconsin Wind Site Assessment program; Change a Light, Change Wisconsin program; and other Focus on Energy programs, visit www.focusonenergy.com.

DENVER REGION

Restructuring Activities

Austin, Texas' City Council recently approved Austin Energy's Strategic Plan. By 2020, the utility plans to incorporate 20 percent renewable fuels into the company's resource mix, increase energy efficiency by 15 percent, and reach 100 MW in solar power installations. Amanda Buehler of Public Citizen said, "This plan will help us clean our air, stabilize our energy supplies, create jobs, and ultimately lower energy costs. Setting goals is also a crucial first step toward creating a clean energy cluster here in Austin. This plan puts Austin in the running to become the clean energy leader of the nation." The city council will commit resources to recruiting "clean energy business enterprises" as stated in its "Clean Energy Resolution," which was passed on August 28, 2003. (Source: *SolarAccess.com*, December 9, 2003)

PHILADELPHIA REGION

Restructuring Activities

The Virginia General Assembly heard from a panel of several electric restructuring experts on why electric competition has failed to develop in the state since the state passed deregulation in 1999, The Assembly and the panel also explored how the state should assess stranded costs associated with deregulation. The law states that utilities may recover stranded costs through capped electric rates and transition charges for those customers who switch electric suppliers. Jeff Pollock of Brubaker & Associates, a consulting firm, testified that neither utility in the state has incurred stranded costs from restructuring, but will instead have stranded benefits. Stranded costs are power plants and other assets that lose value after a utility is deregulated and faces competition, and stranded benefits occur when assets gain value. Mr. Pollock pointed out that utilities have not incurred stranded costs because so few customers have switched suppliers. (Source: Knight Ridder/Tribune Business News, November 25, 2003)

SEATTLE REGION

▶ Restructuring Activities

The California state Public Utilities Commission approved a proposal submitted by Southern California Edison (SCE) to build a five MW solar power system that will serve 4,000-5,000 homes. At a cost of \$60 million, the system would be the largest photovoltaic generation system in the world. SCE representatives are soliciting part of the \$30 million emerging renewables fund provided to the California Energy Commission (CEC) by the State of California each year. Some industry officials, including Janice Lin of PowerLight, fear that the funds would "Set a dangerous precedent. Draining those funds would eliminate choice for a lot of consumers." CEC representative Claudia Chandler said the project does not qualify for the rebate program under current rules. She stated: "They would have to petition the commission to change the regulations." The renewables rebate program was established by the CEC in 1998, and provides customers with rebates of 40 to 50 percent of the total renewables cost. Almost 500 customers take advantage of the rebate program. SCE has already announced an agreement

to purchase power from 20 250 KW PV arrays constructed by TrueSolar Solutions and Global Solar Energy in Barstow, California. Construction will begin in early 2004. Expected annual power production will total almost 11 million kWh of power. Lars Bergmann, SCE's Director of Qualifying Facilities Contracts supports the program: "Until now, this particular renewable energy technology has been used in small, limited applications such as individual customer rooftops. For the first time in California, this project will elevate the limited use of rooftop PV energy to the same category as traditional forms of bulk power generation." (Source: *Knight Ridder Tribune Business News*, December 5, 2003 and *PRNewswire*, December 4, 2003)

In November, Puget Sound Energy (PSE) issued a request for proposals for 150 megawatts of wind power purchased through long-term power purchase contracts or through the purchase of a wind power plant. Responses are due by January 9, and the projects are scheduled to come online by the end of 2005. To view the request for proposal, visit www.pse.com/about/supply/resourceplanning.html. The utility has proposed pilot programs and other initiatives in heat pump maintenance, lighting retrofits, ventilation system maintenance for commercial, residential, and industrial customers to expand their energy efficiency programs. The utility has also proposed higher energy efficiency targets for 2004 and 2005; savings that are expected to result in the avoidance of 39.2 MW of electric load. The PSE plan is subject to approval by the Washington Utilities and Transportation Commission. (Source: www.pse.com)

Effective January 1, 2004, Arizona Public Service (APS) will double its purchase credit to \$4 per watt for customers whose solar systems are tied to APS' grid. Customers off the grid will continue to receive the original rebate price of \$2 per watt. APS will also provide a \$700 purchase credit to customers installing solar water heating systems. The program will help APS meet its goal, established by the Arizona Corporation Commission's Environmental Portfolio Standard, of procuring 1.1 percent of total energy from renewable sources. Ed Fox, of APS said, "We clearly need to jump start consumer awareness and use of renewable forms of energy...The hope is that this program will contribute to increased demand for alternative energy sources, thus leading to systems that become more affordable for everyday consumers." APS customers who install a solar system are also eligible to receive a 25 percent credit on the purchase, up to \$1,000. For more information on the solar incentives, visit www.aps.com/my_community/Solar/eps.html. (Source: *Arizona Public Service Press Release*, December 3, 2003)

Pending approval of an agreement that would authorize the purchase of 40 MW of electricity produced from a biomass digestion plant, 40,000 customers of the Los Angeles Department of Water and Power (LADWP) may begin receiving the biomass-derived power by 2008. LADWP will purchase energy from BioConverter Los Angeles LLC at no cost; however, contract agreements commit the utility to purchasing the power at \$48 Mh. David Wiggs of LADWP said, "This agreement demonstrates the LADWP's and the City of Los Angeles' continued commitment to expanding our renewable energy sources...The proposed facility would use innovative technology to convert green materials into a biogas that will produce clean, renewable electricity. It is truly a win-win proposal for the citizens of Los Angeles, the environment, the city, and the private sector green power industry." According to BioConverter Los Angeles, the technology will be 30 to 50 percent more efficient than that used in other anaerobig digestion facilities. The bioconverter will process 3,000 tons daily of green clippings into biogas. Project developers estimate that the facility will provide 1.3 percent of the LADWP power system energy requirements. For more information, visit www.ladwp.com.

Intrepid Technology and Resources has completed the preliminary stage of a biogas production facility. Using manure from a 4,000 cow dairy in Rupert, Idaho, the anaerobic digester will convert the waste into methane gas. Next the methane will be combusted in a turbine generator to create 400-kW electricity that will enter the Idaho power grid. (Source: *SolarAccess.com News*, November 26, 2003)

PRIVATE SECTOR

GENERAL ANNOUNCEMENTS

The Green-e Renewable Energy Certification Program of the Center for Resource Solutions (CRS) has launched the "Made with Renewable Energy" labeling program. Announced at the 8th National Green Power Marketing Conference, the Green-e logo will be placed on consumer products manufactured by companies purchasing certified renewable energy. Gabe Petlin of CRS said, "Now, when you see the Green-e logo on a product you'll know that a significant portion of the energy required to produce that product came from or was offset by high-quality renewable energy." Products of the 10,000 businesses and 110,000 households with the green-e logo range from alcohol to fabrics to foods. For more information on obtaining the Green-e logo, contact CRS at 415-561-2100 or visit www.green-e.org.

The World Resources Institute's Green Power Marketing Development Group is buying record amounts of green power. A recent purchase of 97 MW includes renewable energy certificates (RECs), hydrogen fuel cells, wind, landfill gas, and other renewables including hydropower. Each REC represents the amount of pollution prevented when electricity is generated by green power and allows corporate members to meet environmental goals. The 12 members of the group are Alcoa Inc., Cargill Dow LLC, Delphi Corporation, The Dow Chemical Company, DuPont, General Motors, IBM, Interface, Johnson & Johnson, Kinko's, Pitney Bowes, and Staples. "We joined this partnership in 2003 to help us diversify our energy purchasing," said William Stavropoulos, President and Chief Executive Officer of The Dow Chemical Company. "By working together, these twelve businesses can have a tremendous impact on supporting and developing renewable energy markets." The group intends to create 1,000 MW of green power for corporate markets by 2010. (Source: *GreenBiz.com*, November 25, 2003; World Resources Institute press release, September 17, 2003)

ATLANTA REGION

No news of interest to report.

BOSTON REGION

A new glass roof with 2,600 photovoltaic panels will cover the Coney Island, New York, subway station by April 2005. The plans for the 76,000 square-foot roof are part of a \$283 million rehabilitation project at the 84-year old terminal. Upon completion, the project will generate 15 percent of the station's electricity, and is anticipated to save 17,000 tons of carbon dioxide emissions over the next 40 years. (Source: *New York Post*, November 24, 2003)

Habitat for Humanity of Westchester, New York, a participant in the state's ENERGY STAR[®] Labeled Home Demonstration Project, has dedicated six new homes in Yonkers, New York. The six units, three side-by-side duplexes built on a lot donated by the City of Yonkers, were designed to be energy efficient with the help of Steven Winter Associates, Inc. Each roof contains ten 120-watt panels. The buildings were made using principles of building systems, environmentally friendly products, and sustainable design. (Source: *SolarAccess.com News*, December 4, 2003)

CHICAGO REGION

No news of interest to report.

DENVER REGION

No news of interest to report.

PHILADELPHIA REGION

No news of interest to report.

SEATTLE REGION

University of California at Berkley's Associated Students of the University of California (ASUC) and Graduate Assembly (GA) have activated the campus' first solar powered system at the Martin Luther King, Jr. Student Union. The two student groups gave \$50,000 each from their annual budgets to partially fund the installation of 312 photovoltaic cells on the 4,000 square-feet roof. ASUC chose the local company PowerLight to provide the solar system. At peak times, the roof creates up to 59-kW of electricity. ASUC's Mr. Cordi said about the project, "It's meant to be an educational tool that it is possible to do solar in the Bay Area. We really hope that the university will study this installation and think about all the other flat, sunny roofs on campus that could support similar systems." (Source: Associated Press, November 19, 2003)

Pierce College in Woodland Hills and the Los Angeles Community College District (LACCD) have installed a new solar electric system and cogeneration system to save energy. PowerLight Corporation designed and built a 191-kW system on a carport structure covering 20,000 square feet. A cogeneration system comprised of six natural gas fueled microturbines generates 360-kW of electricity and recovers waste heat energy for chilling water for the college's air conditioning system. Pierce College used a performance contract with Chevron Energy Solutions and, with additional grants and rebates, will halve their operating costs within 15 years. These green power measures are the beginning of Pierce College's 10-year master plan to better serve the students and communities of the San Fernando Valley. (Source: PowerLight press release, November 20, 2003; Pierce College press release, November 20, 2003)

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ALTERNATIVE FUELS AND VEHICLES

GENERAL ANNOUNCEMENTS

The 2004 Toyota Prius, a second generation hybrid-electric vehicle, continues to receive praise. *Motor Trend Magazine* named the Toyota Prius the "2004 Car of the Year" when the vehicle outperformed 26 other cars, including in handling and power delivery. *Car and Driver* magazine named the Prius in its "10 Best Cars," based on value and drivability. Toyota Motor Sales is increasing production of the Prius to 47,000 from 36,000 for 2004. (Source: *e-FFICIENCY*, December 5, 2003; *EERE Network News*, December 10, 2003)

A coalition of hydrogen and fuel cell users and suppliers have joined together to advance fuel cell powered buses. The National Fuel Cell Bus Technology Initiative, coordinated by WestStart-CALSTART, is a six-year, \$150 million development effort to support research, development, and demonstration of fuel cell and hydrogen technology. For more information, visit www.weststart.org.

ATLANTA REGION

▶ Infrastructure Activities

National Aeronautics and Space Administration's John C. Stennis Space Center in Mississippi, has retrofitted a 10,000-gallon gasoline tank to store E85, a blend of 85 percent ethanol and 15 percent gasoline. Initially the pump will service about 54 E85 vehicles, but is projected to service 300 E85 compatible vehicles in the next three years as the Federal complex's alternative fueled vehicle fleet grows. (Source: *FYI Newsletter*, November 24, 2003)

BOSTON REGION

No news of interest to report.

CHICAGO REGION

No news of interest to report.

DENVER REGION

No news of interest to report.

PHILADELPHIA REGION

No news of interest to report.

SEATTLE REGION

▶ Infrastructure Activities

The County Board of Supervisors for Ventura County, California, has unanimously voted to restrict the purchase of sport utility vehicles (SUV) for county agencies. This resolution occurs shortly after former Governor Gray Davis (D) signed a law in October requiring state agencies to prove a "critical need" when requesting a SUV or all terrain vehicle. The law will take effect on January 1, 2005. Ventura County currently has 116 SUVs in its 1,500 vehicle fleet, and is replacing all retired vehicles with hybrid-electric cars and trucks. (Source: *Greenwire*, November 26, 2003)

Union City, California, has opened a natural gas fueling station with gas being sold at \$1.78 per gallon to the public. Alameda County Congestion Management Agency provided a \$100,000 grant to pay for the construction of the station. (Source: *Tri-Valley Herald*, December 8, 2003)

New Products and Services

The United States Air Force has its first battery dominant fuel cell hybrid bus for use at Hickam Air Force Base. The Air Force partnered with Enova, the State of Hawaii's High Technology Development Corporation (HTDC), and Hydrogenics to build the bus. The hybrid fuel cell bus consists of Enova's Panther 120-kW drive system integrated with Enova's newly developed Dual 8-kW inverters, 380V DC/DC converter, Hybrid Control Unit and a Mobile Fuel Cell Generator, incorporating a Hydrogenics 20-kW fuel cell power generation module and a battery pack. (Source: *Clean Edge News*, December 12, 2003)

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MEETINGS, CONFERENCES, AND TRAINING WORKSHOPS

- ➤ Refer to <u>Appendix C</u> New Technologies
- Refer to Appendix D Calendar of Upcoming Events.

MULTIPLE REGIONS

The Association of Energy Engineers will offer two online seminars Skills Update for Certified Energy Managers on January 14 and Energy Auditing Fundamentals on January 22. The first seminar provides the latest and most important developments in the energy field. The second seminar covers the fundamental components of an effective energy audit. For more information on the seminars, see www.aeecenter.org/training or www.aeecenter.org/training o

ATLANTA REGION

The Department of Energy is sponsoring the 10th Annual National Clean Cities Conference in Fort Lauderdale, Florida, on May 2-5. The conference will cover regulations, product availability, and infrastructure of alternative fuel vehicles. For more information, visit www.ccities.doe.gov/conference/lauderdale.

BOSTON REGION

The Federal Fleet Policy Council and the General Services Administration are sponsoring FedFleet 2004: The Road to the Future is Now, which will be held in New York on July 20-22. The conference will cover the following topics: designing transportation for a sustainable future, introduction to fleet management, hybrid vehicles, alternative fuel vehicle grant applications, innovative vehicle technologies, building business with the Federal government, fuel cells, infrastructure technologies, New York's green fleet program, current and future alternative fuels, and automotive trends and their impact. For more information, visit www.fedfleet.org/generalinformation.asp

CHICAGO REGION

The Twin Cities of Minneapolis is hosting EnviroDesign®8 in Minneapolis on April 12-13. The event will highlight environmental stewardship and sustainable development in the public and private sector. Workshop sessions will cover ten tracks including: green theory and design, green business practices, communities, case studies product design and development, energy; materials; health and safety; future trends, and sustainable mobility. For more information, visit www.isdesignet.com/ED/index.html.

The American Wind Energy Association presents Global WINDPOWER 2004 in Chicago, Illinois, on March 28-31. The conference will provide an international perspective on the vision, goals and challenges facing the wind energy industry. For more information, visit www.awea.org/global04.html.

DENVER REGION

The Partnership for Advancing Technology in Housing, Builders Magazine, the Maryland Energy Administration, and other organizations are sponsoring the National Green Building Conference in Austin, Texas, on March 14-16. The conference will focus on cutting edge innovative green building technologies. The program will involve tours, exhibits, educational sessions, and awards. For more information, visit www.nahbrc.org/conferencesseminarsgreen.asp?TrackID=&CategoryID=1676.

PHILADELPHIA REGION

The U.S. Department of Energy and the United States Council for Automotive Research are sponsoring 2004 Future Car Congress in Washington, D.C., on June 27-30, 2004. The conference will consist of technical sessions, exhibits, vehicle displays and test-drives, and panel discussions with government officials. For more information, visit https://www.fuelcelltoday.com/FuelCellToday/EventListings/EventListingsExternal/calendar_showdetail/0,1719,667,00.html.

SEATTLE REGION

The City of Portland, Oregon, and the Green Roofs for Healthy Cities are organizing the Greening Rooftops for Sustainable Communities in Portland, Oregon, on June 3-4. The conference will cover three main topics: policies and programs to support green roofs, green roof design and implementation, and research and technical papers on green roof performance. For more information, visit www.greenroofs.ca/grhcc/about conference.htm.

The U.S. Department of Energy, the Energy Trust of Oregon, Eugene Water and Electric Board. and other organizations are sponsoring Solar 2004: A Solar Harvest: Growing Opportunities in Portland, Oregon, on July 10-14. The following themes will be covered: solar applications in buildings, solar collector technologies; PV technologies; systems and applications; solar thermal systems and applications; energy delivery and storage; resource assessment; hydrogen, fuels and chemical processes; solar energy and society; and indirect solar technology and applications. For more information, visit www.ases.org

INTERNATIONAL

Hamburg Messe is sponsoring WindEnergy 2004 in Hamburg, Germany, on May 11-14. Leading manufacturers will present recent offshore developments, turbines, and latest inland turbines. For more information, visit www.hamburg-messe.de/windenergy/we en/start main.htm.

The British Wind Energy Association and the Scottish Renewables Forum are sponsoring All-Energy Opportunities in Aberdeen, Scotland on May 25-27. The conference will consist of plenary sessions and parallel workshops on wind, hydrogen, wave, tidal, biofuels, solar, and fuel cells. For more information, visit www.all-energy.co.uk.

The European Union, the United Nations Environment Program, and other organizations are sponsoring the 19th European PV Conference in Paris, France, on June 7-11. The conference will highlight solar research, technology and demonstration achievements. For more information, visit www.photovoltaic-conference.com

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STUDIES, REPORTS, AND ANALYSES

SOLAR AND RENEWABLE ENERGY

Solar Opportunity Assessment Report, Solar Catalyst Group, December 2003

The report examines factors necessary to allow the United States solar industry to grow. The author's conclusions are a result of interviews with more than 30 solar system manufacturers, system integrators, and industry experts. The report identifies an annual growth rate of 24 percent over the past decade and focuses on pathways to expand growth. The report can be downloaded from www.solarcatalyst.org.

Renewable Resources Development Report, California Energy Commission, December 2003

This report, required as part of California's new Renewable Portfolio Standard (RPS), concluded that California's renewable opportunities are plentiful. California obtains its renewable resources from geothermal heat, biomass, wind and solar energy. The report found that California is capable of generating ten times more renewable electricity than current levels of 30 billion kWh, or 11 percent of the state's total electricity production and that production cost trends of renewable electricity are

economically feasible with the RPS policy. The report also encouraged reducing energy use contributing to global climate change. The California Energy Commission, the California Public Utilities Commission, and the California Power Authority have adopted an Energy Action Plan that will accelerate the RPS target of 20 percent renewable generation to 2010. The report is available on the California Energy Commission's website at www.energy.ca.gov/reports/2003-12-02 500-03-103F.PDF.

APPENDIX A STATUS OF FY 2004 APPROPRIATIONS BILLS

(In Millions)

HOUSE

SENATE

Actual FY 2004 and Omnibus Funding (in billions)	302(b) Allocations / Approved Funding Level	Bill No.	Full Cmte. Mark Up	Floor Vote	Vote on Conf Rpt.	302(b) Allocations/ Approved Funding Level (New)	Bill No	Full Cmte. Mark Up	Floor Vote	Vote on Conf. Rpt.
Agriculture \$16.943 ***	\$17,005	H.R 2673	6/25	7/14	Omnibus 12/8	\$17,005	S. 1427	7/17	11/6	
Commerce \$37.8 ***	\$37,914	H.R. 2799	7/16	7/23	Omnibus 12/8	\$37,014	S. 1585	9/4		
Defense \$368 <i>P.L.</i> 108-86	\$368,662	H.R. 2658	6/26	7/8	9/24	\$368,662	S. 1382	7/9	7/17	9/25
Energy and Water Development \$27.33 P.L. 108-137	\$27,080	H.R. 2754	7/15	7/18	11/18	\$27,313	S. 1424	7/17	9/16	11/18
Homeland Security \$29.4 P.L. 108-90	\$28,521	H.R. 2555	6/17	6/24	9/24	\$28,521	H.R. 2555	7/10	7/24	9/24
Interior \$20.17 P.L. 108-108	\$19,627	H.R. 2691	6/25	7/17	10/30	\$19,627	S. 1391	7/10	9/23	11/3
Labor / HHS \$139.76 ***	\$138,046	H.R. 2660	6/25	7/10	Omnibus 12/8	\$137,601	S. 1356	6/26	9/10	
Military Construction \$9.316 P.L. 108-132	\$9,196	H.R. 2559	6/17	626	11/5	\$9,196	S. 1357	6/26	7/11	11/12
Transportation and Treasury \$27.5 ***	\$27,502	H.R. 2989	7/24	9/9	Omnibus 12/8	\$27,502	S. 1589	9/4	10/23	
VA/HUD \$91.3 ***	\$90,034	H.R. 2861	7/21	7/25	Omnibus 12/8	\$90,034	S. 1584	9/4	11/18	

*** Included in *H.J. Res.* 2673 – Consolidated Appropriations for FY 2004. The bill extends operation of programs at the FY 2003 funding level through January 31, 2004.

APPENDIX B NEW LEGISLATION OF INTEREST TO FEMP

HOUSE

Number	Short title	Date	Sponsor	Status	
H. R. 3691	No Short Title	12/8/03	Dutch Ruppersberger (D/MD)	Referred to Committee on the Judiciary	
				ting Federal detention centers a center or Federal prison in	
H. R. 3694	No Short Title	12/8/03	Brad Sherman (D/CA)	Referred to Committee on Ways and Means	
	Amends the <i>Internal Revenue Code of 1986</i> , to extend the deduction for clean-fuel vehicles and certain refueling property through December 31, 2006.				
	Amendments shall	apply to property	placed in service after Dec	ember 31, 2003.	

SENATE

No legislation of interest to report.

APPENDIX - NEW TECHNOLOGIES

For informational purposes only. Listing does not imply endorsement.

TECHNOLOGY	MANUFACTURER	MANUFACTURERS CLAIM	CONTACT
		HVAC	
UVC Air Purification System	National Biological Crop.	Destroys airborne microorganisms to improve the quality of re-circulated indoor air.	www.natbiocorp.com
Power Roof Ventilator	American Coolair	Designed for general exhaust applications with specified medium and high ranges of air volume. Weather resistant and can be used with or without ducts.	www.coolair.com
ZC9011 Series Fan	Zettler Controls Inc	Provides low-voltage control of fan motors and auxiliary circuits in heating, cooling, or heating-cooling applications. Input voltage is 120 -280V, and the output voltage is 24V-40VA.	www.zettlercontrols.com
Ultra 310 Boiler	Weil-McLain	Used in large home, small commercial applications and in multiple boiler system installations. Provides combustion efficiency of 93.3%. In low-temperature applications provides up to 95.6% efficiency.	www.weil-mclain.com
		LIGHTING	
Compact Ballasts	Advance	Reduce high-wattage ballast length by over an inch. Size-efficient ballast offers access to smaller 400-W-sized ballast housings in place of larger housings	www.advancetransformer.com
Cypher	Lighting Systems	Uses precision optics and combines reflector and refractor for illumination in floodlighting and indirect lighting	www.ltgsys.com/newprod.htm
Super Luminance LED	PEC Lamp	Provides high intensified radiance with larger beam distribution	www.peclamp.com
Portable Light	Wobble Light LLC.	Counter-weighted hemispherical base returns light to the upright position if unit is moved. Innovative cooling system provides safety to users and increases the bulb life.	www.wobblelight.com

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TECHNOLOGY	MANUFACTURER	MANUFACTURERS CLAIM	CONTACT		
	ENERGY MANAGEMENT TOOLS				
EnerMiser TM	EG Energy Controls	Network tool that operates over the internet to help monitor and control the use of electric energy devices.	www.egenergy.com/ess.htm		
		MISCELLANEOUS			
Turbo Alernator	Elliott Microturbines	Microturbine packaged as combined heat and power unit. Produces 100kW of electrical power and 172 kW of thermal exhaust power. Cogeneration usages for hot water, low pressure steam, absorption chiller, and drying system applications. Provides up to 85% of total thermal efficiency.	www.tapower.com		
H2000 TM Leak Detector	Sensistor Technologies Inc.	Uses hydrogen to detect gas leaks within seconds. Eliminates time delay in helium mass spectrometer method.	www.sensitor.com		
Clean Source DC Energy Storage System	Active Power	System expanded to include additional power levels. Provides uninterruptible power supply backing up critical applications in the 100-2000-kW power ranges.	www.activepower.com		
Phoenix HMI-41	Therma-Stor	Monitors relative humidity, temperature, dew point, and grains per pound in air stream	www.thermastor.com		

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APPENDIX MEETINGS, CONFERENCES, AND OTHER EVENTS

NOTE: New events are highlighted in blue. DOE-sponsored events are highlighted in green.

FEMP Training Calendar: www.eere.energy.gov/femp/newsevents/training.shtml

GENERAL ANNOUNCEMENTS

DATE	EVENT	SPONSOR
January 14,	Skills Update for Certified Energy	Association of Energy
2004	Managers Distance Learning Seminar	Engineers
January 22,	Energy Auditing Fundamentals Distance	Association of Energy
2004	Learning Seminar	Engineers

ATLANTA REGION

DATE	EVENT	SPONSOR
January 13-14, 2004	Introduction to ESPC Miami, FL	FEMP
February 3, 2004	Green Power Options Ft. Lauderdale, FL	Green Power magazine
February 10- 11,2004	Sixth Annual Energy Management Workshop Cocoa, FL	Florida Solar Energy Center
March 18-19, 2004	GREENPRINTS Conference & Tradeshow Atlanta, GA	Department of Energy
May 2-5, 2004	10 th Annual National Clean Cities Conference Fort Lauderdale, Florida	Department of Energy

BOSTON REGION

DATE	EVENT	SPONSOR
March 9-10, 2003	GLOBALCON 2004 Boston, MA	FEMP
March 10-13, 2003	NESEA Building Energy Conference Boston, MA	Northeast Sustainable Energy Association and Massachusetts Technology Collaborative
July 20-22, 2004	FedFleet 2004: The Road to the Future is Now New York, NY	General Services Administration and the Federal Fleet Policy Council

CHICAGO REGION

DATE	EVENT	SPONSOR
March 28-31,	Global WINDPOWER 2004	American Wind Energy
2004	Chicago, IL	Association
April 12-13,	EnvironDesign®8	Twin Cities of
2004	Minneapolis, MN	Minneapolis/St. Paul

DENVER REGION

DATE	EVENT	SPONSOR
March 14-16, 2004	National Green Building Conference Austin, TX	Builder Magazine, Partnership for Advancing Technology in Housing and Maryland Energy Administration
March 23-24, 2004	Advanced ESPC/Financing Golden, CO	FEMP

PHILADELPHIA REGION

DATE	EVENT	SPONSOR
June 27-30, 2004	2004 Future Car Congress Washington, D.C.	DOE and United States Council for Automotive Research

SEATTLE REGION

DATE	EVENT	SPONSOR
January 26-28, 2004	Distributed Energy Resources Sustaining the Momentum: Delivering the Benefits San Diego, CA	CADER
March 1-3, 2004	POWER-GEN Renewable Energy Conference Las Vegas, NV	American Council on Renewable Energy
June 3-4, 2004	Greening Rooftops for Sustainable Communities Portland, OR	City of Portland, Oregon and Green Roofs for Healthy Cities
July 10-14, 2004	SOLAR 2004 Portland, OR	Department of Energy, Energy Trust of Oregon, and Eugene Water and Electric Board

INTERNATIONAL

DATE	EVENT	SPONSOR
January 21-23, 2003	International Congress on Renewable Energy for Sustainable Development Bangalore, India	Solar Energy Society of India
March 18-19, 2004	3 rd European Conference on Green Power Marketing Lausanne, Switzerland	Green Power Marketing
May 11-14, 2004	WindEnergy 2004: International Trade Fair Hamburg, Germany	Hamburg Messe
May 25-27, 2004	All-Energy Opportunities Aberdeen, Scotland	British Wind Energy Association and the Scottish Renewables Forum
May 30-31, 2004	World Renewable Energy Forum 2004: Global Benefits and Policies Bonn, Germany	World Council for Renewable Energy and EuroSolar
June 7-11, 2004	19 th European PV Conference Paris, France	The European Union and United Nations Environment Program